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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,382	03/24/2004	Michael T. Hertz	31878-004000	3337

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WASHINGTON, DC 20004-2128

EXAMINER
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FEENEY, BRETT A

ART UNIT	PAPER NUMBER
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3624

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/807,382	<b>Applicant(s)</b> HERTZ ET AL.	
	<b>Examiner</b> BRETT FEENEY	<b>Art Unit</b> 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 30-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 30-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/24/2004</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Status of the Claims**

1. The following is a NON-FINAL office action in response to Applicants submission received on 06/01/2009.
2. Applicant elected claims 1 - 10 and 30 - 39, with traverse for examination. Claims 11 - 29 are herein withdrawn from consideration.
3. Claims 1 - 10 and 30 - 39 are currently pending and have been examined.

### **Restriction Requirement - Response to Arguments**

4. Applicant's election of claims 1 - 10 and 30 - 39, with traverse is herein acknowledged. Applicant's arguments have been fully considered and are not persuasive. Applicant argues:
  - i) The Examiner has not made a *prima facie* case for restriction.
  - ii) There is no serious burden of examination on the Examiner because the six inventions are classified in two different classes.

In response to Applicant's argument, the Examiner has not made a *prima facie* case for restriction, the Examiner respectfully disagrees. The Examiner notes that a separate classification and separate status in the art were both explicitly shown in the previous office action; only one of which is necessary in order to establish a *prima facie* case for restriction (see MPEP 803). Therefore, a *prima facie* case for restriction has

Art Unit: 3624

been established and restriction is proper. Applicant also alleges that because all six of the claimed inventions are “associated” with a collaborative environment, they are not distinct. However, the Examiner notes that the environment in which an invention is practiced does not patentably distinguish the claimed invention over other inventions, rather it is the positively recited limitations of the claim that give a claim patentable weight. As noted in the previous office action, the six claimed inventions have separate utility on the basis that the claimed inventions are separately usable, not the context in which they are intended to perform. It is the context in which they are intended to perform which makes the six inventions usable together in a single combination; which was noted in the previous office action [*sic*] “[i]nventions I, II, III, IV, V, and VI are related as subcombination disclosed a usable together in a single combination. The subcombinations are distinct from each other [] [because] they are shown to be separately usable.”

In response to Applicant’s argument, there is no serious burden on the Examiner because the six inventions are classified in two different classes, the Examiner respectfully disagrees. When an examiner searches non-patent literature (NPL), the examiner performs the searches by sub-class. Therefore, in the instant case, in order to search all 6 sub-classes, the Examiner would have to perform 6 separate NPL searches, which would create a serious burden on the Examiner. Therefore, a *prima facie* case for restriction has been established and restriction is proper (see MPEP 808.02 (C)).

Art Unit: 3624

The requirement for restriction is still deemed proper and is therefore made **FINAL**. Claims 11 - 29 are withdrawn from further consideration pursuant to 37 C.F.R. 1.142 (b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

### **Rejections under § U.S.C. 112**

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- Claims 1-10 and 30-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- Independent claim 1 recites "an autonomous agent module that sets business rules, sets and responds to trigger criteria". An autonomous agent module is drawn to artificial intelligence. There is no written description provided for what program code is used, steps implemented or the like such that a program (or programmed hardware) would be able to autonomously "set business rules" or "set trigger criteria". Therefore, it appears that there is insufficient support for "an autonomous agent" as claimed. Claims 2-10 and 30-39 suffer from this same

Art Unit: 3624

defect as either reciting “an autonomous agent” or depending from a claim that recites “an autonomous agent”.

6. Claims 1-10 and 30-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
  - Claim 1 recites “an autonomous agent module that sets business rules, sets and responds to trigger criteria”. However, the Examiner is unable to find support in the disclosure for how the autonomous agent module performs the aforementioned functions that would enable one of ordinary skill in the art, at the time of the invention, to make and use the claimed invention. It is not clear how a software program could autonomously determine business rules and set trigger criteria. As claimed, an autonomous agent module is directed towards artificial intelligence, which is not sufficiently described in the specification in such a way that would enable one of ordinary skill in the art, at the time of the invention, to make and use the claimed invention. Claims 2-10 and 30-39 suffer from this same defect as either reciting “an autonomous agent” or depending from a claim that recites “an autonomous agent”.
  - Claim 1 recites that the root cause analyzer module determines causes of unwanted occurrences in data, sets exclusions for detection and removes the cause of unwanted occurrences. However, the Examiner is unable to find support

Art Unit: 3624

in the disclosure for how the root cause analyzer performs the aforementioned functions that would enable one of ordinary skill in the art to make and use the claimed invention. It is not clear how a software program could determine that an occurrence in data is unwanted, determine that an exclusion should be set and know to remove the data (and further ensure that application still functions after the data is removed). Claims 2-10 and 30-39 suffer from this same defect as either reciting "a root cause analyzer module" or depending from a claim that recites "a root cause analyzer module".

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 2-5, 7-10, 31-34, and 36-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Claim 2 recites "autonomous agent module analyzes the data". It is not clear what is meant by analyzing the data. Analysis may mean that the data is graphed or a clustering algorithm is applied, a linear algorithm is applied, etc. Therefore this limitation is vague and indefinite. The Examiner has interpreted analyzing the data to mean applying any conventionally constructed algorithm is applied to the data. Claims 7, 31 and 36 suffer from this same defect. Further claims depending from claims are rejected as depending from claims 2, 7, 31 and 36.

**Rejections under § U.S.C. 101**

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 1-10 and 30-39 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
10. Claims 1-10 and 30-39 are directed to an apparatus. However, the recited components of the apparatus appear to lack the necessary physical components (hardware) to constitute a machine or manufacture under § 101. Therefore, these claim limitations can be reasonably interpreted as computer program modules or software *per se*. The claims are directed to functional descriptive material *per se* and hence non-statutory.

**Rejections under § U.S.C. 103**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Art Unit: 3624

12. Claims 1-10 and 30-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Huben et al., US 5,950,201, (herein Van Huben), in view of Williams et al., US 6,766,205, (herein Williams).

**Claim 1**

Van Huben discloses a system for collaborative engineering, said system comprising:

- *a user interface* (see FIGs 1 and 2 and associated text; noting “GUI” and “machine to person interface”).
- *an open architecture module that provides data in its native format* (see FIG 2 and associated text; noting the data management system provides data in a plurality of formats. Further noting Section 1.3 "Data Types".);
- *an autonomous agent module that sets business rules, sets and responds to trigger criteria, and gathers the data provided by the open architecture module* (see FIGs 8a and 8b; noting rules for “Design Fix Management” and “Engineering Changes” are set and applied. Further noting, "design rules" are business rules that are applied to component selection based on manufacturability, specification limits and the like.);
- *a workflow manager module that polices and enforces the business rules in data routing so that individual departments, organizations, and individuals are notified that the data was provided by the open architecture module and performs specific tasks in an order in accordance with the business rules established by*

Art Unit: 3624

*the autonomous agent module* (see FIG 10 and associated text; noting the "Data Manager" enforces rules for types of data, locations, access, control and the like. Further noting "Library Management" provides for routine data control functions including ownership of the data and provides "instant notification" to the data owner when a task is executed.);

- *an infrastructure connectivity module* (see FIG 1 and associated text; noting the "Local Area Network" is an infrastructure connectivity module that provides a means for linking communications.);
- *a report engine module for extracting, formatting, and delivering data routed by the workflow manager module* (see FIG 16 and associated text; noting the "Data Management System" controls routed data, versioning, data structures. Further noting, the "Package Manager" provides reporting functionality.);
- *a root cause analyzer module that sets an alarm level to detect unwanted occurrences in the data, sets exclusions for the detection of unwanted data, determines the cause of the unwanted occurrence, and removes the cause of the unwanted occurrence* (see FIGs 8a and 8b and associated text; noting; the module detects a violation of rules, identifies which design rule has been violated and applies a "Design Fix" by either removing the component or moving the component.);

Van Huben discloses uses component data to allow or exclude components from a product design however Van Huben does not explicitly recite, but Williams teaches:

Art Unit: 3624

- *a data mining module that look for trends and anomaly in the data (see FIG 11 and associated text; noting data is compiled and anomalies "HIGH and "LOW" in respect to control limits are recorded. Further, see FIG 13 and associated text; noting trends in data a graphed.).*

It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to combine the collaborative engineering system of Van Huben with the data mining module of Williams to provide a predictably resulting system that utilizes data trends and anomalies to aid in product design.

## **Claim 2**

Van Huben/Williams teaches the limitations above. Furthermore, Williams teaches:

- *wherein the autonomous agent module analyzes the data and compiles trend information regarding the data (Id. at **Claim 1**).*

It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to combine the collaborative engineering system of Van Huben/Williams with the data analyzing module of Williams to provide a predictably resulting system that utilizes data trends and anomalies to aid in product design.

## **Claim 3**

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben discloses:

Art Unit: 3624

- wherein the autonomous agent module executes a predetermined action if the trend information meets a trigger criterion (see FIGs 8a and 8b and associated text; noting; the module detects a violation of rules, identifies which design rule has been violated and applies a "Design Fix" by either removing the component or moving the component. The Examiner notes that the action may include informing the data owner of the violation, executing an automated script, etc.).

#### **Claim 4**

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben discloses:

- wherein the predetermined action is to notify a designated user that the trend information met the trigger criteria (*Id.* at **Claim 1**. Further noting, "alerts the user").

#### **Claim 5**

Van Huben/Williams teaches the limitations above. Furthermore, Van Huben discloses:

- wherein the predetermined action is to execute a change affecting at least one of the group consisting of: the open architecture module, the autonomous agent module, the workflow module, the infrastructure connectivity module, the report engine module, the root cause analyzer module and the data mining module (*Id.* at **Claim 1**; noting changes include changing the flow of work, allowing a violation

Art Unit: 3624

of rules for an EC; change in the data version, etc. All of the aforementioned changes "affect" at least one of the "modules").

**Claims 6-10 and 30-39 recite limitations addressed in the claims above. Therefore, claims 6-10 and 30-39 are rejected for similar reasons.**

### **Conclusion**

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Brett Feeney** whose telephone number is **571.270.5484**. The Examiner can normally be reached on Monday-Thursday, 7:30am-6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **BRAD BAYAT** can be reached at **571.272.6704**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

Any response to this action should be mailed to:

Art Unit: 3624

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or faxed to **571-273-8300**.

Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window:**

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/BRETT FEENEY/

Examiner, Art Unit 3624

/Bradley B Bayat/

Supervisory Patent Examiner, Art Unit 3624